# EXPLORE®

# Guide for Interpreting Your EXPLORE® Item-Response Summary Report

The EXPLORE Item-Response Summary Report consists of the following:

- Interpretive Guide (this booklet)
- EXPLORE Test Booklet
- Item-Response Summary:

Table 1: English Table 3: Reading Table 2: Mathematics Table 4: Science

Your EXPLORE Item-Response Summary Report shows the percentage of your students who selected the correct response to each item, the percentage of your students who selected each incorrect response, and the percentage who did not answer the item. In addition, the report gives the average percentage of students who responded correctly to the items in each content area. Reference group results are provided to assist you in evaluating your students' performance on each item relative to that of other EXPLORE-tested students. A booklet containing the test items is included to further assist you in identifying the specific knowledge or skills being tested.

The item-level information in this report can help you relate your students' overall performance on the EXPLORE tests to your local curriculum, including identifying consistent patterns of strength or weakness in your tested students' performance across areas of your curriculum measured by the test. If, for example, you find that your students perform consistently lower than the reference group on items within a content area such as Punctuation, you can examine the text of the Punctuation items to obtain specific examples of the skills or knowledge involved. In using the report, you should determine your students' academic strengths and weaknesses relative to the skills and knowledge measured by the test items, and address apparent weaknesses at the content area level.

If you have questions about the *EXPLORE Item-Response Summary Report*, please call ACT at 319/337-1741.

results, please note that test items within a content area are to be treated as samples of skills and knowledge from a broader content domain. New EXPLORE forms are developed and administered each year that cover the same content area, but not with the same items. For a given content area within an **EXPLORE** test form. test items are a carefully selected sample of items from the content domain.

As you interpret your



2008–2009 EXPLORE Item-Response Summary Report – Test Form: 01A

School Report

Report Group: 8TH GRADE Reference Group: FALL 8TH GRADE Total students in report group: 311

**SECTION A** 

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TABLE 1: Item-Response Summary for English

SECTION B	Percent of report group selecting each option, by response position					REFERENCE	Percentage difference (report group minus reference group percentage correct)			
	Asterisk marks correct response					group	Report group responded correctly			
Item Number	A/F	B/G	C/H	D/J	Omit	percentage correct	Less often	As often	More often	Item Number
Usage/Mechanics: Punctuation										
2 14 17 29 33 35	*71 14 8 *71 *72 3	3 1 4 14 12 *74	10 14 10 8 13 20	16 *71 *77 7 2	0 0 0 1 1	60 56 62 54 59 60	SEC	CTION D	11 15 15 17 13	2 14 17 29 33 35
39	18	/ <sub>5</sub> c	ັກ <sub>23</sub>	*54	0	41			13	39
Avg. % Correct			70 (	SECTI	ON E	56				
Usage/Mechanics: Grammar and Usage										
1 3 21 31 32 37 40 4 15 Avg. % Correct	2 9 9 23 8 17 5 6 5	16 *89 38 12 6 *80 14 *86 *75	*80 0 3 *55 16 1 *78 6 8	2 2 *50 10 *69 2 2 2	0 0 0 0 1 0 1 1 1	72 75 47 40 60 62 58 63 51		8 3 9	14 15 18 20 23 24	1 3 21 31 32 37 40 4
Usage/Mechanics: Sentence Structure										
6 7 11 16 18 20 22 25 27 28 30 34 38 9	2 1 4 *79 13 *87 5 17 8 2 7 14 *62	11 12 23 18 16 6 11 17 10 24 *80 12 27 11	7 3 4 3 *61 4 3 *63 9 *70 4 *53 9	*80 *84 *69 0 10 3 *81 2 *73 4 8 21 2 *74	0 0 0 0 0 0 0 1 1 0 1	67 76 52 71 42 76 72 48 63 54 67 44 44 42		8 8 9	13 17 19 11 15 10 16 13 18 32	6 7 11 16 18 20 22 25 27 28 30 34 38 9



## SECTION A. Identify your report group (top of first page of report for each subject area).

- ? Does your report group represent your entire 8th- or 9th-grade class or some portion of your 8th- or 9th-grade class? (Note: Only the records of students tested in standard-time test administrations are included.)
  - If your report group represents only a portion of your class, your results may not apply to your entire class.

## SECTION B. Study the items within each content area (EXPLORE test booklet).

- ? What differences are there between your curriculum and the skills and knowledge covered by each EXPLORE content area?
  - Use the descriptions of the tests given on the back page of this guide to determine the skills and knowledge tested within each content area. Use the items themselves to identify more specific skills or knowledge required to answer correctly the items in each content area. Identify the skills and knowledge you emphasize in your curriculum, and determine the similarities and differences between your curriculum and the test contents.
  - EXPLORE test items represent skills and knowledge from broader content domains. Focus on each domain of skills and knowledge, rather than the contents of specific items. Specific items will not be used again on future forms of EXPLORE.

## SECTION C. Evaluate your report group performance in each content area (percentage selecting each response option).

- ? Given your curriculum, is the percentage of your report group answering each item correctly consistent with your expectations? (The correct response is indicated by an asterisk.)
  - Determine whether your students tended to respond correctly to items in a content area that you emphasize in your curriculum.
- ? Is a large percentage of your report group choosing incorrect response options?
  - Incorrect options may represent common misconceptions related to the skill or knowledge measured by the item. If your students did not perform as well as you expected on some items, the incorrect options can help you identify the source of errors being made.

- ? Is a large percentage of your report group omitting responses to items?
  - If you have high omit rates at the end of the test, you may want to consider other factors, such as general test-taking skills, that can influence your students' performance.
  - High omit rates near the beginning of the test or on difficult items may indicate that your students did not know the answer.

## SECTION D. Compare your report group performance with the reference group performance (percentage difference).

- ? The reference group represents fall 8th graders who completed the same EXPLORE test form as your students (i.e., user group). Is there a consistent pattern of your report group responding correctly less often, as often, or more often than the reference group in a content area?
  - Differences in percentage correct that occur in the "Less often" and "More often" columns are likely to reflect real differences between the report and reference groups. When differences across items in a content area consistently fall in these columns, your report group is more or less prepared than the reference group in that content area. Some individual items may appear in these columns solely due to chance and should be interpreted cautiously, however. Look for consistent patterns of difference between your report group and the reference group performance.
  - Differences in percentage correct between your report group and the reference group that occur in the "As often" column are likely not to be significant.

## SECTION E. Examine the overall performance of your report group in each content area (average percentage correct).

- ? Is your report group's average percentage correct similar to that of the reference group?
  - If consistent patterns of item-level performance occur in a content area, comparing report and reference group average percentage correct will help confirm your report group's strengths and weaknesses in that content area. Where no consistent pattern is apparent, differences between the report and reference group average percentage correct are likely due to chance.
  - Report and reference group comparisons of average percentage correct (as well as patterns of item-level performance) should always be interpreted relative to the skills and knowledge emphasized in your curriculum.

## **Description of the EXPLORE Tests**

### The English Test (40 questions — 30 minutes)

The English Test measures your students' understanding of the conventions of standard written English and of rhetorical skills. The test consists of several prose passages, each accompanied by a number of multiple-choice test items.

### Usage/Mechanics

**Punctuation.** The items in this category test the student's knowledge of the conventions of internal and end-of-sentence punctuation, with emphasis on the relationship of punctuation to meaning.

**Grammar and Usage.** The items in this category test the student's understanding of agreement between subject and verb, between pronoun and antecedent, and between modifiers and the words modified; verb formation; pronoun case; formation of comparative and superlative adjectives and adverbs; and idiomatic usage.

**Sentence Structure.** The items in this category test the student's understanding of relationships between and among clauses, placement of modifiers, and shifts in construction.

#### Rhetorical Skills

**Strategy.** The items in this category test the student's ability to choose expressions appropriate to an essay's audience and purpose; to gauge the effect of adding, revising, or deleting supporting material; and to judge the relevancy of statements in context.

**Organization.** The items in this category test the student's ability to organize ideas and to choose effective opening, transitional, and closing sentences.

**Style.** The items in this category test the student's ability to select precise and appropriate words and images, to maintain the level of style and tone in an essay, to manage sentence elements for rhetorical effectiveness, and to avoid ambiguous pronoun references, wordiness, and redundancy.

### The Mathematics Test (30 questions — 30 minutes)

The Mathematics Test measures your students' mathematical reasoning. The test emphasizes quantitative reasoning rather than memorization of formulas or computational skills. In particular, it emphasizes the ability to solve practical quantitative problems that are typically encountered in middle-school and junior-high courses.

**Pre-Algebra.** Items in this category are based on operations with whole numbers, decimals, fractions, and integers. Topics include place value, square roots, scientific notation, factors, ratio, and proportion and percent.

**Elementary Algebra.** Items in this category are based on operations with algebraic expressions, including evaluation of algebraic expressions by substitution, use of variables to express functional relationships, solution of linear equations in one variable, use of real number lines to represent numbers, and graphing of points in the standard coordinate plane.

**Geometry.** Items in this category cover the use of scales and measurement systems, plane and solid geometric figures and associated relationships and concepts, the concept of angles and their measures, parallelism, relationships of triangles, properties of a circle, and the Pythagorean theorem. All of these topics are addressed at a level preceding formal geometry.

**Statistics/Probability:** Items in this category cover elementary counting and rudimentary probability; data collection, representation, and interpretation; and reading and relating graphs, charts, and other representations of data. These topics are addressed at a level preceding formal statistics.

### The Reading Test (30 questions — 30 minutes)

The Reading Test measures reading comprehension and requires your students to derive meaning from several reading passages by (1) referring to what is explicitly stated and (2) reasoning to determine implicit meanings and to draw conclusions, comparisons, and generalizations. The test includes three prose passages based on topics in prose fiction, the humanities, and the social sciences. The test focuses on the kinds of skills that readers must use in studying written materials across a range of subject areas, rather than on information from outside the passages, rote recall of facts, isolated vocabulary items, or rules of formal logic.

**Prose Fiction.** Intact short stories or excerpts from short stories or novels.

**Social Sciences.** Anthropology, archaeology, biography, business, economics, education, geography, history, political science, psychology, sociology.

**Humanities.** Passages from memoirs and personal essays and in the content areas of architecture, art, dance, ethics, film, language, literary criticism, music, philosophy, radio, television, and theater.

### The Science Test (28 questions — 30 minutes)

The Science Test measures your students' scientific reasoning skills acquired through grade 8. The content of the Science Test is based on the type of content typically covered in science courses through grade 8. Materials are drawn from the life sciences, Earth/space sciences, and physical sciences. The test emphasizes scientific reasoning skills, but knowledge that is typically covered in middle school and junior high school science courses is needed to answer some of the guestions.

The items require your students to recognize and understand the basic features of, and concepts related to, the information provided; to examine critically the relationships between the information provided and the conclusions drawn or hypotheses developed; and to generalize from the given information to gain new information, draw conclusions, or make predictions.

The test presents six sets of scientific information, each conveyed in one of three different formats.

**Data Representation.** This format presents students with graphic and tabular material similar to that found in science journals and texts. The items measure skills such as graph reading, interpretation of scatterplots, and interpretation of information presented in tables.

**Research Summaries.** This format provides students with descriptions of one or more related experiments. The items focus on the design of experiments and the interpretation of experimental results.

**Conflicting Viewpoints.** This format presents students with expressions of several hypotheses or views that, being based on differing premises or on incomplete data, are inconsistent with one another. The items focus on the understanding, analysis, and comparison of alternative viewpoints or hypotheses.

